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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/823,940 03/30/2001 0102374-00015 Robert Martin 7591 21125 EXAMINER 7590 11/28/2003 NUTTER MCCLENNEN & FISH LLP PATEL, HARESH N WORLD TRADE CENTER WEST ART UNIT PAPER NUMBER 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604 2126

Please find below and/or attached an Office communication concerning this application or proceeding.

	A1:4: No		-A
· ,	Application No.	Applicant(s)	
Office Action Summary	09/823,940	MARTIN ET AL.	
	Examiner	Art Unit	
	Haresh Patel	2126	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute,  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed  s will be considered timely. the mailing date of this communic. D (35 U.S.C. § 133)	ation.
1) Responsive to communication(s) filed on	_•		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This a	action is non-final.		
3) Since this application is in condition for allowar closed in accordance with the practice under E	nce except for formal matters, pro x parte Quayle, 1935 C.D. 11, 45	osecution as to the merit	s is
Disposition of Claims			
4)  Claim(s) <u>1-40</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) <u>1-40</u> is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or	vn from consideration.		
Application Papers			
9) The specification is objected to by the Examiner 10) The drawing(s) filed on 30 March 2001 is/are: a Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the original than the correction of the original than the correction of the control of the correction	a) accepted or b) objected to drawing(s) be held in abeyance. See son is required if the drawing(s) is objected to aminer. Note the attached office priority under 35 U.S.C. § 119(a)	e 37 CFR 1.85(a). jected to. See 37 CFR 1.12 Action or form PTO-152	
<ul> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the prioring application from the International Bureau</li> <li>* See the attached detailed Office action for a list of the since a specific reference was included in the first since a specific reference was included in the first 37 CFR 1.78.</li> <li>a) The translation of the foreign language provided the second of the second of the first sentence of the reference was included in the first sentence of the reference was included in the first sentence of the second of the second of the second of the first sentence of the reference was included in the first sentence of the second of</li></ul>	s have been received in Application ity documents have been received (PCT Rule 17.2(a)). Of the certified copies not received priority under 35 U.S.C. § 119(at sentence of the specification or evisional application has been received priority under 35 U.S.C. §§ 120	ed in this National Stage ed. e) (to a provisional application Data Steived. e and/or 121 since a spec	Sheet.
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and Trademark Office	5) Notice of Informal P	(PTO-413) Paper No(s) Patent Application (PTO-152)	

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#### DETAILED ACTION

1. Claims 1-40 are presented for examination.

### **Priority**

2. Applicant's claim for domestic provisional priority under 35 U.S.C. 119(e) is acknowledged. The claimed terms are not disclosed in the provisional application; hence, applicant does not benefit the effective date as the provisional priority date.

# Specification

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.

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- (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

The disclosure is objected. Some of the informalities are:

- i. The "DETAILED DESCRIPTION OF THE INVENTION" section contains significant amount of prior art contents. All the known prior art contents from the "DETAILED DESCRIPTION OF THE INVENTION" section needs to be moved into the "Description of Related Art" sub-section of the "BACKGROUND OF THE INVENTION" section.
- ii. The vague terms, like, boundary event, context object, etc. needs to be replaced with the clear terms in the disclosure.Appropriate correction is required.
- 4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "System and method for telecommunications to process telephone call processing as per user needs using the markup language".

5. Applicant is reminded of the proper content of an abstract of the disclosure.

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A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract of the disclosure is objected to because it does not contain key terms involved in the invention. The term "hereinafter" is not allowed. Also the abstract has vague terms, like, to effect the execution of the operations. Correction is required. See MPEP § 608.01(b).

### **Drawings**

6. Figures 1, 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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# Information Disclosure Statement

7. An initialed and dated copy of Applicant's IDS form 1449, Paper No. 4 and 5, is attached to the instant Office action.

## Claim Objections

8. Claims 1-28 is objected to because of the following informalities:

The term "hereinafter" is not allowed.

Appropriate correction is required.

### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 9. Claim 32 recite the term "call feature module". There is insufficient antecedent basis for this limitation in the claim.
- 10. Claims 1 and 29 contains a step to generate a compiled representation and then instantiating an object. It is not clear how the object is instantiated.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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11. Claims 1-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The term "compiled representation", "a call feature", "service", "operations", "boundary event", "feature", "selected event", "further operation", etc. in claims 1-11 are relative terms, which renders the claim indefinite.
- b. The term "compiled representation", "a call feature", "service", "handler logic operations", etc. in claims 12-21 are relative terms, which renders the claim indefinite.
- c. The term "compiled representation", "a call feature", "service", "handler logic operations", "feature logic operations", "a type of at least one selected method", "virtual function" etc. in claims 22-23 are relative terms, which renders the claim indefinite.
- d. The term "compiled representation", "feature administration", "service", "logic operations", etc. in claims 24-28 are relative terms, which renders the claim indefinite.
- e. The term "compiled representation", "a call feature", "service", "feature operations", etc. in claims 29-40 are relative terms, which renders the claim indefinite.

# Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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13. Claims 1, 12, 16, 17, 20, 21-25, 28-30, 32, 37-40, are rejected under 35 U.S.C. 102(e) as being anticipated by Dodrill et al. 6,490,564 (Hereinafter Dodrill).

14. As per claims 1, 12, 22, 24, 29-30, 32, 37-39, Dodrill teaches the following:

a method for providing telecommunications services, the method comprising the steps of,
a telecommunications system, comprising:

generating a compiled representation of a textual description in a mark-up language of operations for performing; any of a call feature or service (e.g., ,The XML documents are generated using prescribed rule sets that specify executable functions performed by an application runtime environment in an application server. Hence, the application server is able to provide unified voice messaging services and data services via an IP network by executing stored XML documents for voice enabled web applications, col. 7, line 8 – col. 9, line65),

responding to an event indicative of a boundary of a telecommunications service or feature for instantiating an object (hereinafter "context object") to effect execution of that service or feature (e.g., the XML documents define user interface logistics and tie services and application server events together in a meaningful way, forming a coherent application or sets of applications, The application server 66 the application server 66 generates new XML documents during runtime and supplies the generated XML documents to the web server 64, col. 9, line 1 – col. 13, line 19),

accessing, with the context object, handler logic operations embodied in the compiled representation, the handler logic operations controlling any of the accessing, processing and execution of further instructions necessary to effect execution of the service or feature (e.g., the

skinny clients and tiny clients 18 access the proxy browser 62 via the PSTN 10 and the IP gateway 87b. The IP gateway 87b includes both a proxy browser 62 and a voice resource 86, enabling the IP gateway 87 to provide all audio control service for the skinny clients and tiny clients 18. Hence, the PSTN 10 is used merely for transfer of analog audio signals, with intelligent application processing being provided by the proxy browser 62. Note that if one of the telephones 18c' is an IP telephone, then it can access the server 64 via an IP connection 82; in this case, the browser internal to the IP telephone 18c' would process only audio functions, and would ignore any tags associated with text or image content, col. 9, line 1, col. 13, line 19),

accessing, with the context object and in accord with the handler logic operations, feature logic operations embodied in the compiled representation, the feature logic operations executing additional features or services (e.g., the use of open protocols such as HTTP and HTML enable any client 42, regardless of its configuration, to access an HTML web page from a server that has no knowledge of the configuration of the requesting client, col. 9, line 1, col. 13, line 19),

resolving at run-time a type of at least one selected method required for effecting the execution of an feature logic operation referenced by the compiled representation (e.g., The application server executes the voice-enabled web application by runtime execution of extensible markup language (XML) documents that define the voice-enabled web application to be executed. Each voice application operation can be defined as any one of a user interface operation, a logic operation, or a function operation, abstract),

a call control module that controls a call processing context associated with a subscriber, and a call feature module in communication with the call control module, the feature control module accessing a compiled representation of textual description in a mark-up language of logic

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defining a telecommunication service provided to a subscriber in response to an event to effect execution of the service (e.g., A unified web-based voice messaging system provides voice application control between a web browser and an application server via an hypertext transport protocol (HTTP) connection on an Internet Protocol (IP) network. The application server executes the voice-enabled web application by runtime execution of extensible markup language (XML) documents that define the voice-enabled web application to be executed. Each voice application operation can be defined as any one of a user interface operation, a logic operation, or a function operation. Each XML document includes XML tags that specify the user interface operation, the logic operation and/or the function operation to be performed within a corresponding voice application operation, the XML tags being based on prescribed rule sets that specify the executable functions to be performed by the application runtime environment, abstract, the telephony applications 22 and 30 are state aware, ensuring that prescribed operations between the application servers 20 or 26 and the user devices 18 occur in a prescribed sequence. For example, operations such as call processing operations, voicemail operations, call forwarding, etc., require that specific actions occur in a specific sequence to enable the multiple components of the public switched telephone network to complete the prescribed operations, col. 3, line 8 - col. 6, line 33),

parsing the textual description to generate a compiled representation of the logic instructions, and instantiating an object (hereinafter "feature context object") in response to an event that accesses the compiled representation to effect execution of the telecommunication service defined by the logic instructions (e.g., Hence the application server is able to efficiently

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execute voice web applications merely by parsing selected XML documents and implementing XML tags that are specified within the selected XML documents, col. 7, lines 8-60).

15. As per claims 16,17, 20, 21, 23, 25, 28, 40, Dodrill teaches the following:

the textual description defines a set of rules and actions for providing the telecommunication service, the markup language is any of HTML, the logic textual description defines a call policy associated with a subscriber, XML or any extension thereof, (e.g., The method also includes generating extensible markup language (XML) documents for the voice application operations, respectively, using a prescribed rule set for each of the user interface operation, the logic operation, and the function operation. The rule set specifies executable functions to be performed by an application runtime environment for the corresponding operation. The generating step includes providing at least one XML tag that specifies a corresponding one of the user interface operation, logic operation, and function operation in accordance with the corresponding rule set. The generating step also includes selectively including in each XML document a reference to another one of the XML documents based on the sequence of voice application operations and the corresponding rule set. The XML documents are then stored for execution of the voice application by an application server in the application runtime environment, col. 9, line 1, col. 10, line 63),

the compiled representation is implemented in a C++ environment, utilizing virtual functions to facilitate such resolution, (e.g., Logic and functions are written in a programming language, such as C, C++, Java, etc. These applications are compiled or interpreted and are invoked through a web server facility such as a Common Gateway Interface (CGI). Hence,

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pages may be created dynamically by the application 48 as it is executing, col. 1, line 20, col. 4, line 52),

the telecommunication service is any of a call, a call feature, and subscriber or feature administration (e.g., The application server 66 also generates XML tags 106 and 108 that specify attributes for the user. For example, the XML tag 106 identifies the user identifier as "user", where the value "user " specifies another XML document within the XML applications and functions portion 96 that stores specific subscriber profile information, for example user name, work telephone number, cellular telephone number, pager number, and call forwarding profile information, etc., col. 7, line 8 – col. 11, line 33).

## Claim Rejections - 35 USC § 103

- 16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 17. Claims 2-11, 13-15, 18, 19, 26, 27, 31, 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dodrill in view of Danne et. al. 6,226,286 (Hereafter Danne).

Dodrill does not specifically show that the telephone call instantiates the object, which accesses the HTML information to process the telephone call.

However, Danne teaches the following:

instantiating the context object in response to a boundary event with respect to the telecommunications service or feature, instantiating the context object in response to an event

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indicative of any of call origination or call termination, passing notification of at least selected events to the context object, by effecting execution of further operations with respect to the call feature or service, an event notification of which does not result in the effecting of execution of further operations with respect to the call feature or service by the context object, instantiating the context object in response to a boundary event with respect to the telecommunications service or feature, passing notification of at least selected events to the context object, the textual description defines a set of rules and actions for providing the telecommunication service, the textual description defines a call policy associated with a subscriber, the event includes a call control event indicative of a signal received from the telecommunications switch, the feature context object maintains information regarding present state of an on-going telecommunications service, the event is a call progress event occurring with respect to the telecommunication service, a telecommunications switch generates the event is a call progress event provided by the call control module in response to a signal received with respect to status of an active telephone call (e.g., FIG. 6 shows the procedure when a call is made. In the first block 1 the A subscriber requests the B subscriber to be called, from his computer PC, in any of the above described ways. FIG. 5 shows the signalling sequence when a call is made. The request to call the B subscriber is transferred from the computer PC to the web server WS, which forwards the request to the personal assistant PA, which is also shown in step 2 in FIG. 6, col., 6, line 15 – col. 7, line 29, The present invention relates to a service node between Internet networks and a telecommunications network, said node being used to order telephony services by means of HTML pages from a computer having a WWW browser. The invention also relates to a method for calling a B subscriber, in which the Call is ordered from the computer but the connection is

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set up between the telephones of the A and B subscribers' telephones. The service node communicates with computers connected to computer networks using the HTTP protocol. The node stores data related to a subscriber; said data can be used when the user requests a telephony service. The node is centrally located, which enables the use of its services even if the user moves to another location and terminal, abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Dodrill with the teachings of Danne in order to facilitate a method for telecommunications to process telephone call processing as per user request using the markup language.

#### Conclusion

18. Examiner has found numerous arts related to the disclosed subject matter. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See Form PTO-892.

Also, examiner makes a note that the claims 1-40 were rejected during the international search by the Bhatia et. al. 6,029,203 and Breneman et. al. 5,974,135 references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (703) 605-5234. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee, can be reached at (703) 305-8498.

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The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Haresh Patel

November 16, 2003.

JOHN FOLLANSBEE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100